

EV573183541US

PTOS Rec'd PCT/PTO 13 DEC 2002  
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| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | ATTORNEY'S DOCKET NUMBER<br><b>075834.00402</b>                     |
| INTERNATIONAL APPLICATION NO.<br><b>PCT/JP03/007822</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | U.S. APPLICATION NO. (if known, see 37 CFR 1.5)<br><b>10/517877</b> |
| INTERNATIONAL FILING DATE<br><b>June 19, 2003</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | PRIORITY DATE CLAIMED<br><b>June 20, 2002</b>                       |
| TITLE OF INVENTION<br><b>GaN SEMICONDUCTOR DEVICE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                     |
| APPLICANT(S) FOR DO/EO/US<br><b>Osamu Goto, Osamu Matsumoto, Tomomi Sasaki, Masao Ikeda</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                     |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                     |
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))               <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).               <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))               <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input checked="" type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> |  |                                                                     |
| Items 11 to 20 below concern document(s) or information included:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                     |
| <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information: <b>Letter Under 37 C.F.R. §1.41(c)</b></li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                     |

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

|                                                                                                                                                                                                                                                                            |              |                                                                               |            |                          |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------|------------|--------------------------|-------------|
| U.S. APPLICATION NO. (if known, see 37 CFR 1.5)                                                                                                                                                                                                                            |              | INTERNATIONAL APPLICATION NO.                                                 |            | ATTORNEY'S DOCKET NUMBER |             |
| 10/517877                                                                                                                                                                                                                                                                  |              | PCT/JP03/007822                                                               |            | 075834.00402             |             |
| 21. The following fees are submitted:                                                                                                                                                                                                                                      |              |                                                                               |            |                          |             |
| <input checked="" type="checkbox"/> a) Basic national fee.....                                                                                                                                                                                                             |              |                                                                               |            | \$300.00                 | \$          |
| <input checked="" type="checkbox"/> b) Examination fee.....                                                                                                                                                                                                                |              |                                                                               |            | \$200.00                 | \$          |
| <input checked="" type="checkbox"/> c) Search fee.....                                                                                                                                                                                                                     |              |                                                                               |            | \$500.00                 | \$          |
| TOTAL OF ABOVE CALCULATIONS =                                                                                                                                                                                                                                              |              |                                                                               |            | \$1000.00                | \$ 1,000.00 |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. |              |                                                                               |            |                          |             |
| Total Sheets                                                                                                                                                                                                                                                               | Extra sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE       |                          |             |
| 54                                                                                                                                                                                                                                                                         | - 100 = 0    | /50 =                                                                         | x \$250.00 | \$                       | 0.00        |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).                                                                                                                               |              |                                                                               |            | \$                       | 0.00        |
| CLAIMS                                                                                                                                                                                                                                                                     | NUMBER FILED | NUMBER EXTRA                                                                  | RATE       | \$                       |             |
| Total claims                                                                                                                                                                                                                                                               | 10 - 20 =    | 0                                                                             | x \$50.00  | \$                       | 0.00        |
| Independent claims                                                                                                                                                                                                                                                         | 1 - 3 =      | 0                                                                             | x \$200.00 | \$                       | 0.00        |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)                                                                                                                                                                                                                                |              |                                                                               | + \$360.00 | \$                       | 0.00        |
| TOTAL OF ABOVE CALCULATIONS =                                                                                                                                                                                                                                              |              |                                                                               |            | \$                       | 1,000.00    |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.                                                                                                                                               |              |                                                                               |            | \$                       | 0.00        |
| SUBTOTAL =                                                                                                                                                                                                                                                                 |              |                                                                               |            | \$                       | 1,000.00    |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).                                                                                                                          |              |                                                                               |            | \$                       | 0.00        |
| TOTAL NATIONAL FEE =                                                                                                                                                                                                                                                       |              |                                                                               |            | \$                       | 1,000.00    |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property                                                                                                     |              |                                                                               |            | \$                       | 0.00        |
| TOTAL FEES ENCLOSED =                                                                                                                                                                                                                                                      |              |                                                                               |            | \$                       | 1,000.00    |
|                                                                                                                                                                                                                                                                            |              |                                                                               |            | Amount to be refunded:   | \$          |
|                                                                                                                                                                                                                                                                            |              |                                                                               |            | Amount to be charged:    | \$          |
| a. <input checked="" type="checkbox"/> A check in the amount of \$ 1,000.00 to cover the above fees is enclosed.                                                                                                                                                           |              |                                                                               |            |                          |             |
| b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.                                                                                                      |              |                                                                               |            |                          |             |
| c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit t Account No. 50-1794. A duplicate copy of this sheet is enclosed.                                  |              |                                                                               |            |                          |             |
| d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.               |              |                                                                               |            |                          |             |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.                                                             |              |                                                                               |            |                          |             |
| SEND ALL CORRESPONDENCE TO:                                                                                                                                                                                                                                                |              |                                                                               |            |                          |             |
| Customer No. 33448                                                                                                                                                                                                                                                         |              |                                                                               |            |                          |             |
| SIGNATURE                                                                                                                                                                                                                                                                  |              |                                                                               |            |                          |             |
| Robert J. Depke                                                                                                                                                                                                                                                            |              |                                                                               |            |                          |             |
| NAME                                                                                                                                                                                                                                                                       |              |                                                                               |            |                          |             |
| 37,607                                                                                                                                                                                                                                                                     |              |                                                                               |            |                          |             |
| REGISTRATION NUMBER                                                                                                                                                                                                                                                        |              |                                                                               |            |                          |             |

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10/517877  
DTG Rec'd PCT/PTO 13 DEC 2004  
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"Express Mail" Mailing Label Number EV573183541US

Date of Deposit:

12/13/04

I hereby certify that this correspondence is being deposited with the United States Postal "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and is addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Patent Application entitled: GaN SEMICONDUCTOR DEVICE

Inventor(s): Osamu Goto et al.

Our Case No. 075834.00402

Transmittal Letter to the United States Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371 (PTO-1390), Preliminary Amendment, English Translation of International Application as filed (41 pages), formal drawings (13 pages, Figs. 1A-13B), Letter Under 37 C.F.R. §1.41(c), Un-Executed Oath and Declaration (3 pages), Information Disclosure Statement, PTO/SB/08A, International Search Report and cited references.

Government filing fee \$1,000

Post Card

  
Signature of person mailing application and fee

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DT05 Rec'd PCT/PTO 13 DEC 2004

Dec 13, 2004

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VIA EXPRESS MAIL NO. EV573183541US

Mail Stop PCT  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Re: Osamu Goto et al. application for United States Patent  
Application under the Patent Cooperation Treaty entitled:  
GaN SEMICONDUCTOR DEVICE  
Our Case No. 075834.00402

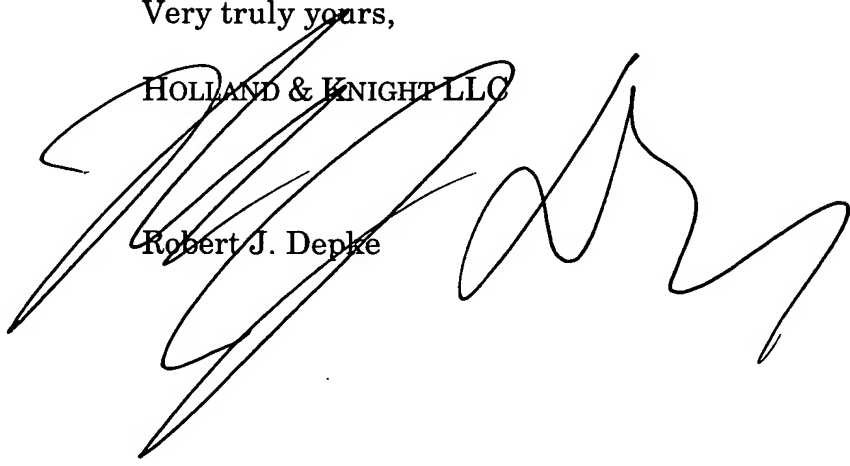
Dear Sir:

Under the provisions of 37 CFR §1.41(c) I hereby file the attached application including 10 claims and 13 sheets of drawings on behalf of Osamu Goto et al., and request that this application be assigned a serial number and filing date pursuant to the provisions of 37 CFR §1.53(b) and (d).

Very truly yours,

HOLLAND & KNIGHT LLC

Robert J. Depke



RJD/mrs  
Encl.